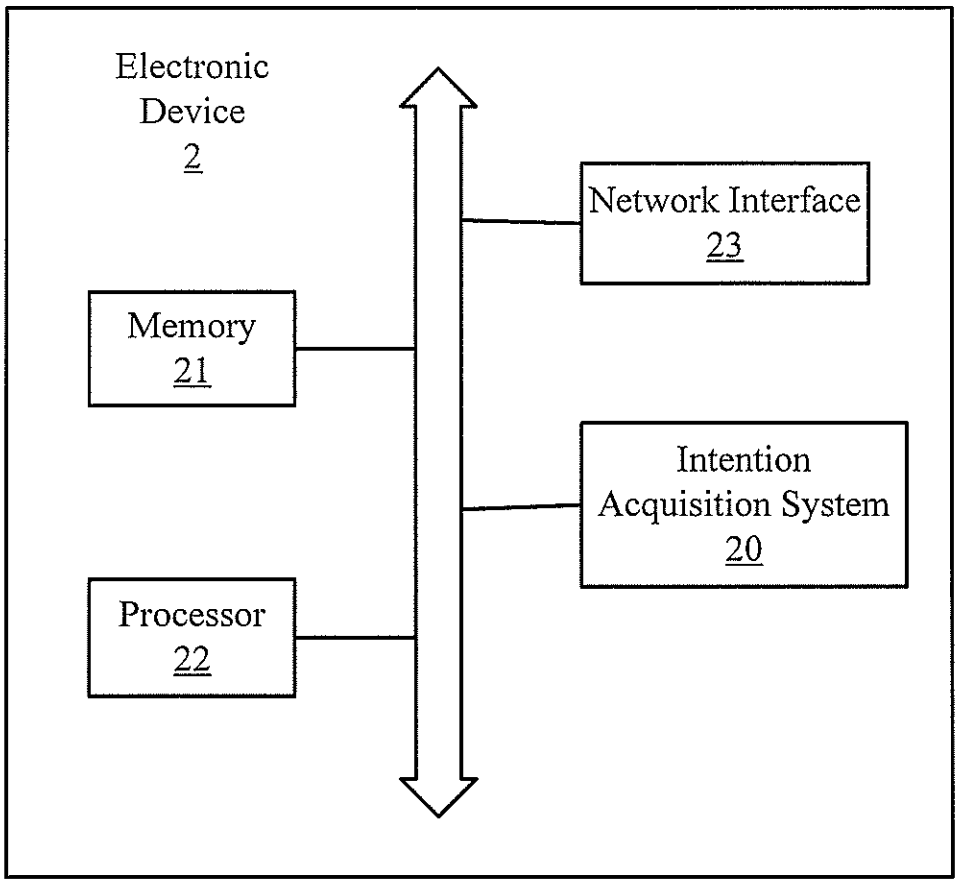
Electronic
Device
2
Network Interface
23
Memory
21
Intention
Acquisition System
20
Processor
22

FIG. 1

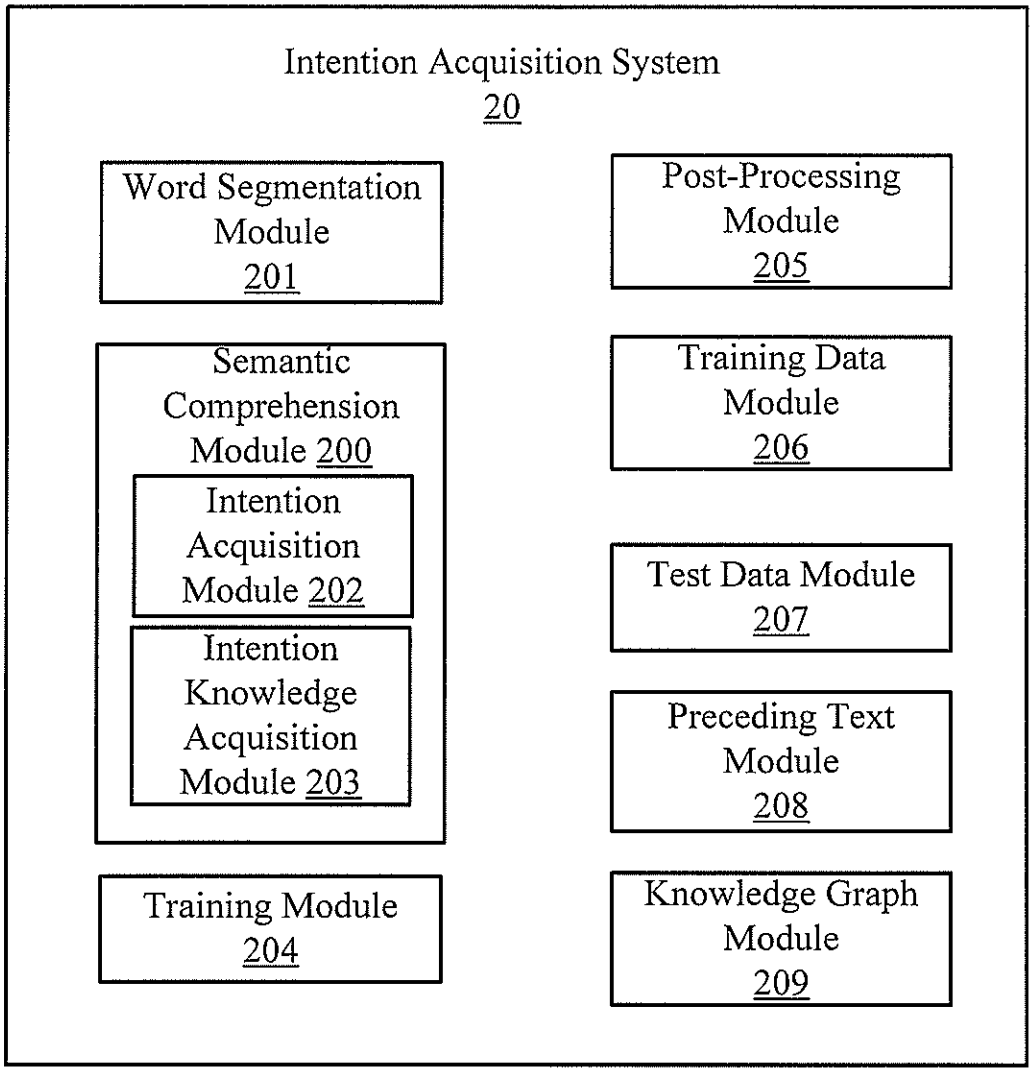
Intention Acquisition System
20
Word Segmentation Module
201
Semantic Comprehension Module 200
Intention Acquisition Module 202
Intention Knowledge Acquisition Module 203
Training Module
204
Post-Processing Module
205
Training Data Module
206
Test Data Module
207
Preceding Text Module
208
Knowledge Graph Module
209

FIG. 2

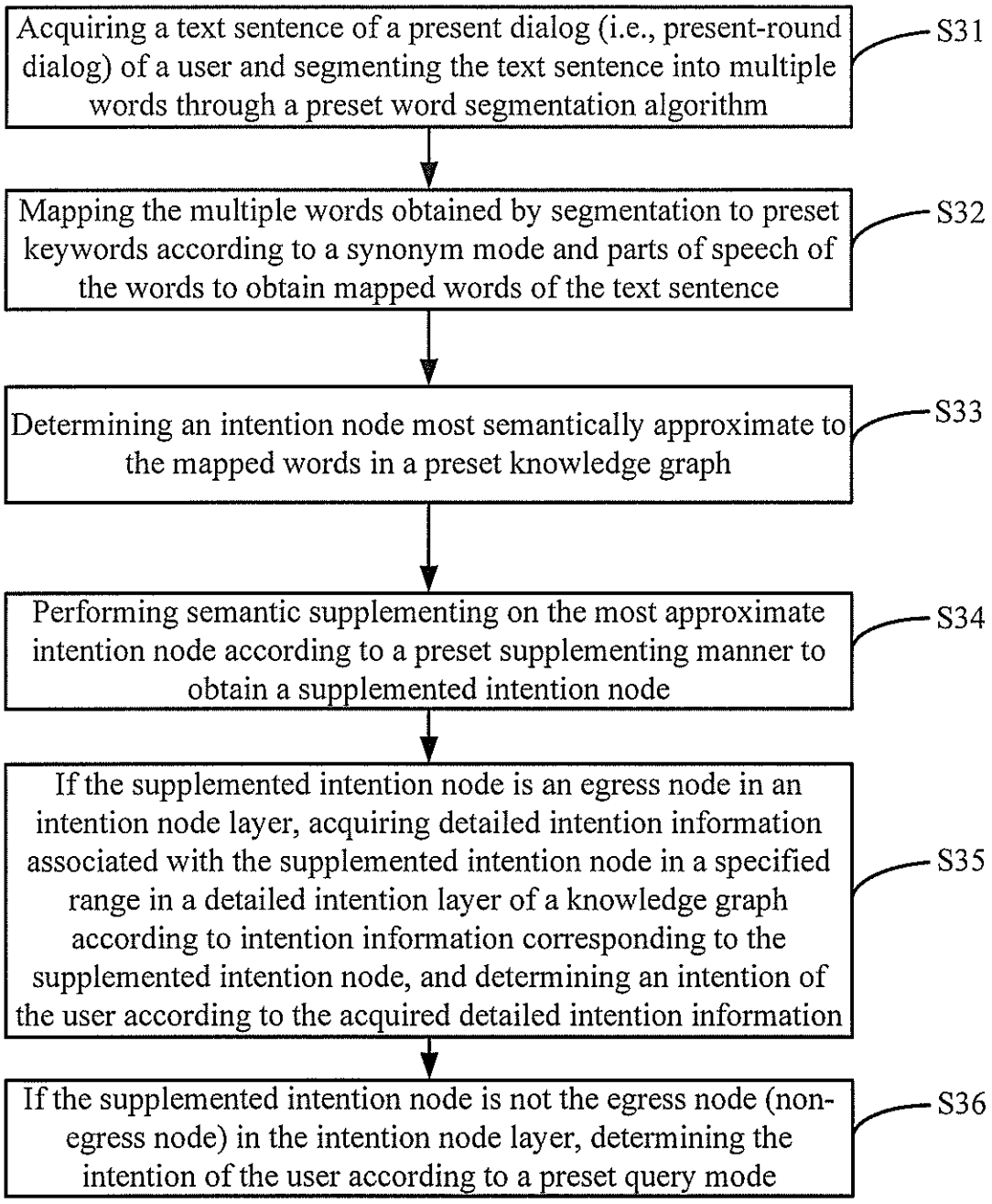
Acquiring a text sentence of a present dialog (i.e., present-round dialog) of a user and segmenting the text sentence into multiple words through a preset word segmentation algorithm
S31
Mapping the multiple words obtained by segmentation to preset keywords according to a synonym mode and parts of speech of the words to obtain mapped words of the text sentence
S32
Determining an intention node most semantically approximate to the mapped words in a preset knowledge graph
S33
Performing semantic supplementing on the most approximate intention node according to a preset supplementing manner to obtain a supplemented intention node
S34
If the supplemented intention node is an egress node in an intention node layer, acquiring detailed intention information associated with the supplemented intention node in a specified range in a detailed intention layer of a knowledge graph according to intention information corresponding to the supplemented intention node, and determining an intention of the user according to the acquired detailed intention information
S35
If the supplemented intention node is not the egress node (non-egress node) in the intention node layer, determining the intention of the user according to a preset query mode
S36

FIG. 3

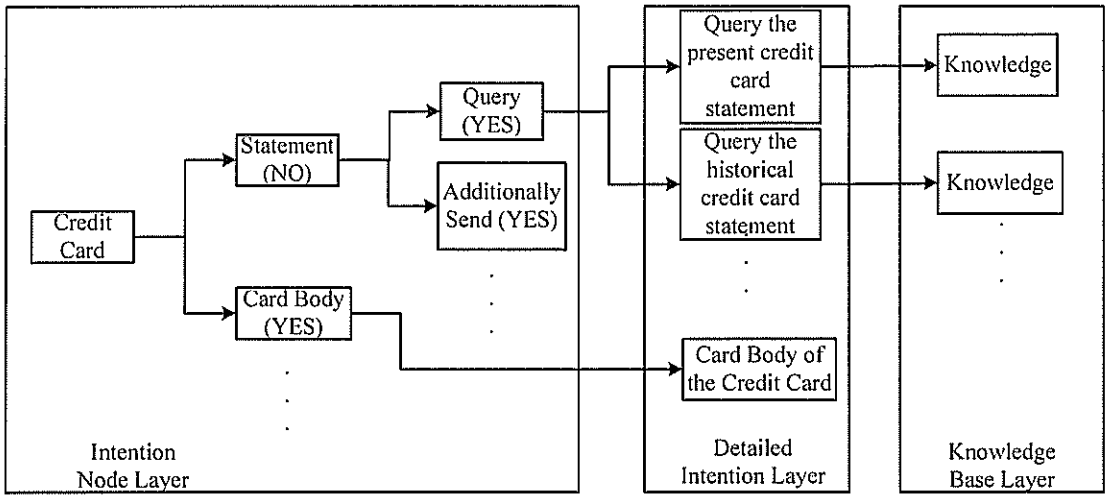
Credit Card
Statement (NO)
Query (YES)
Additionally Send (YES)
Card Body (YES)
Intention Node Layer
Query the present credit card statement
Query the historical credit card statement
Card Body of the Credit Card
Detailed Intention Layer
Knowledge
Knowledge
Knowledge Base Layer

FIG. 4

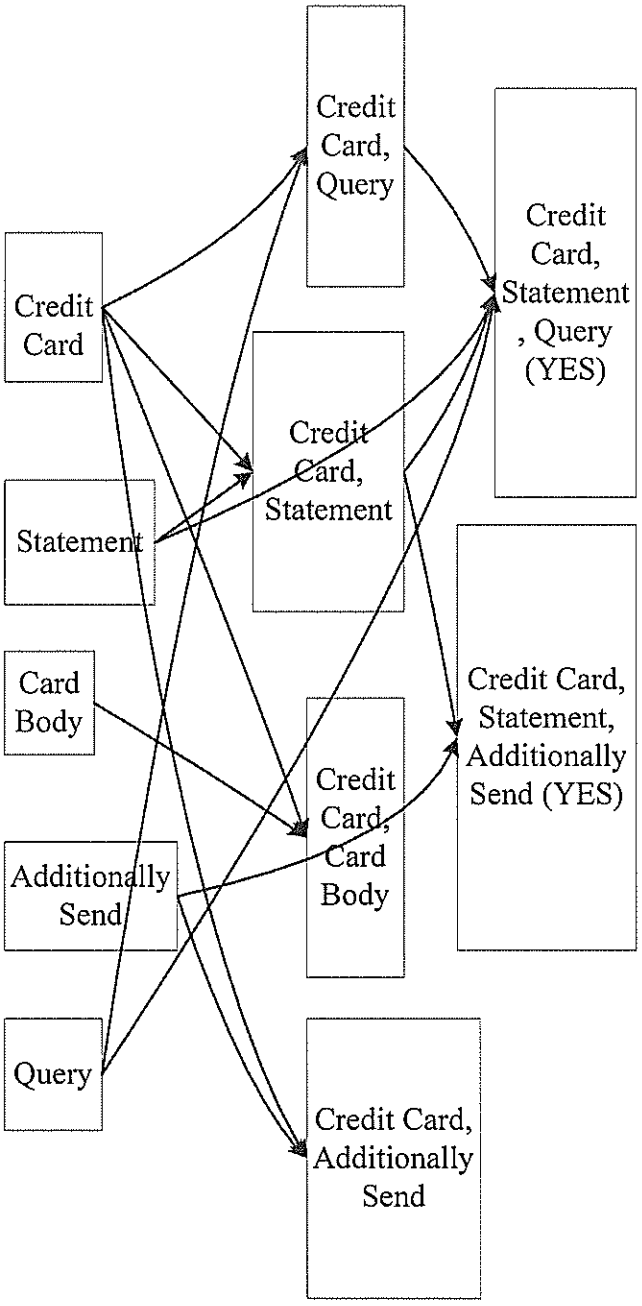
Credit Card
Statement
Card Body
Additionally Send
Query
Credit Card, Query
Credit Card, Statement
Credit Card, Card Body
Credit Card, Additionally Send
Credit Card, Statement, Query (YES)
Credit Card, Statement, Additionally Send (YES)

FIG. 5

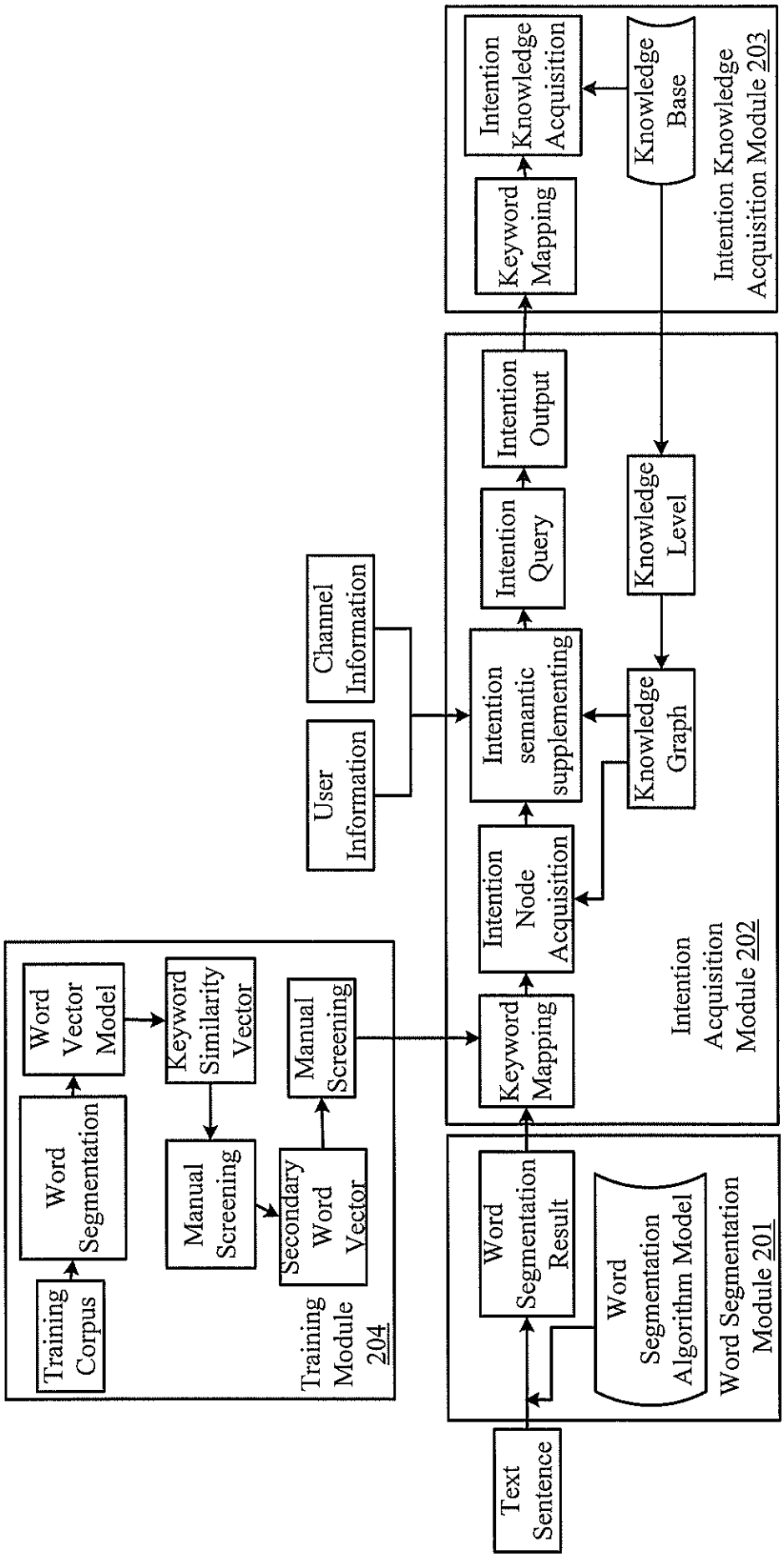
Training Corpus
Word Segmentation
Word Vector Model
Keyword Similarity Vector
Manual Screening
Secondary Word Vector
Manual Screening
Training Module 204
Text Sentence
Word Segmentation Algorithm Model
Word Segmentation Result
Word Segmentation Module 201
Keyword Mapping
Intention Node Acquisition
Intention Acquisition Module 202
User Information
Channel Information
Intention semantic supplementing
Knowledge Graph
Intention Query
Intention Output
Knowledge Level
Keyword Mapping
Intention Knowledge Acquisition
Knowledge Base
Intention Knowledge Acquisition Module 203

FIG. 6

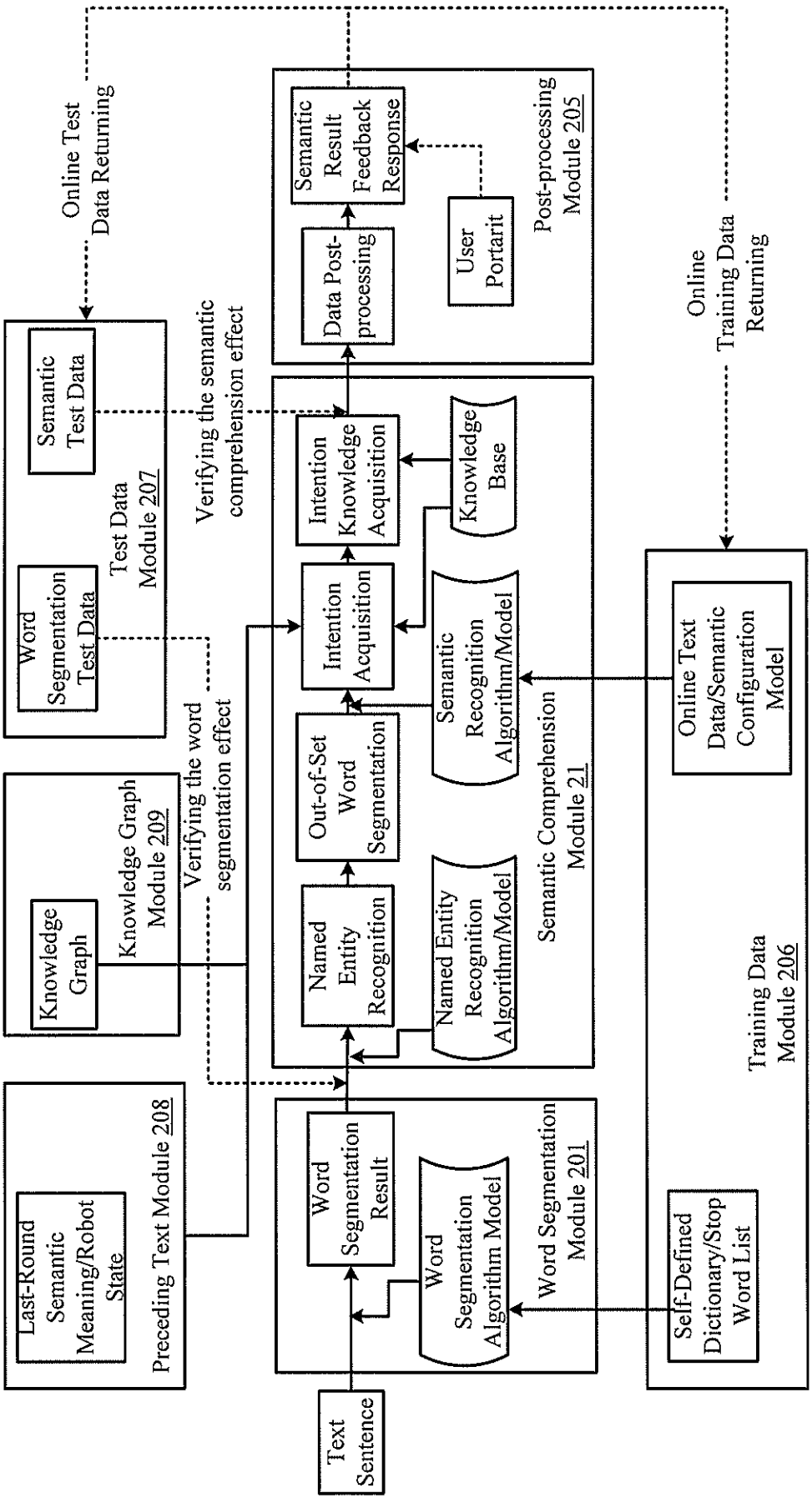
Text Sentence
Preceding Text Module 208
Last-Round Semantic Meaning/Robot State
Knowledge Graph Module 209
Knowledge Graph
Test Data Module 207
Word Segmentation Test Data
Semantic Test Data
Word Segmentation Module 201
Word Segmentation Algorithm Model
Word Segmentation Result
Semantic Comprehension Module 21
Named Entity Recognition
Named Entity Recognition Algorithm/Model
Out-of-Set Word Segmentation
Intention Acquisition
Semantic Recognition Algorithm/Model
Intention Knowledge Acquisition
Knowledge Base
Post-processing Module 205
Data Post-processing
User Portarit
Semantic Result Feedback Response
Training Data Module 206
Self-Defined Dictionary/Stop Word List
Online Text Data/Semantic Configuration Model
Online Test Data Returning
Verifying the word segmentation effect
Verifying the semantic comprehension effect
Online Training Data Returning

FIG. 7